

10' MAX

LEVEL CONTOUR
NO SLOPE

ELEVATION
FLAT SLOPE
IN FRONT OF SARIER

10' MAX

10' MAX

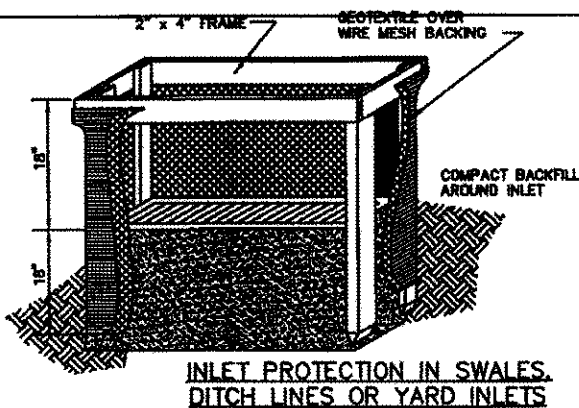
WIRE GEOTEXTILE
AROUND STAKES
BEFORE DRIVING

60 CUBIC YARD

TRENCH
BACKFILL
AND
COMPACT

SILT FENCE
NOT TO SCALE

FABRIC PROPERTIES	VALUES	TEST METHOD
MINIMUM TENSILE STRENGTH	120 LBS. (53 N)	ASTM D 4833
MINIMUM ELONGATION AT 60 LBS.	20 LBS. (9.0 N)	ASTM D 4833
MINIMUM FLEXION STRENGTH	30 LBS. (130 N)	ASTM D 2639
MINIMUM TEAR STRENGTH	40 LBS. (180 N)	ASTM D 4833
APPARENT OPENING SIZE	± 0.04 MM	ASTM D 4751
MINIMUM PERMEABILITY	1X10 ⁻² SEC ⁻¹	ASTM D 4491
UV EXPOSURE STRENGTH RETENTION	70 %	ASTM G 4355



1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE INLET BECOMES FUNCTIONAL.
2. THE EARTH ADJACENT TO THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH OF AT LEAST 18 INCHES.
3. THE PROTECTIVE FRAME SHALL BE CONSTRUCTED OF 2-INCH BY 4-INCH CONSTRUCTION GRADE LUMBER, THE 2-INCH BY 4-INCH POSTS SHALL BE DRIVEN ONE (1) FT. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2-INCH BY 4-INCH FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 8 INCHES BELOW ADJACENT ROADS IF POONDED WATER WILL POSE A SAFETY HAZARD TO TRAFFIC.
4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
5. GEOTEXTILE MATERIAL SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 INCHES BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
6. EARTH SHALL BE PLACED AROUND THE INLET IN COMPACTED 6-INCH LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
7. A COMPACTED EARTH DIKE OR CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION. THE TOP OF THE DIKE SHALL BE AT LEAST 6-INCHES HIGHER THAN THE TOP OF THE FRAME.

A stone access drive for ingress and egress at the site shall be installed. This drive shall be the only entrance and exit to the site. The stone shall be underlain by geo-textile fabric.

All silt fence shall be installed prior to any earthwork activities at the site in the locations shown on the site plan as well as along the front of any lot that slopes towards the street. On sites where a perimeter of temporary seeding (or pre-existing vegetation) cannot be maintained due to limited space, a complete perimeter of silt fence shall be established.

Disturbed areas of the site and dune are to remain idle for more than twenty-one (21) days shall be seeded and straw mulched (or similar) within seven (7) days of completion of initial grading; this includes soil stockpiles. Temporary seeding and mulching of a thirty (30) foot strip of the entire front side and any other down-gradient side of the lot shall be maintained on the site once initial grading is complete.

Stabilization of critical areas within fifty (50) feet of any stream or wetland shall be complete within two (2) days of the disturbance if the site is to remain inactive for longer than fourteen (14) days.

Following completion of the construction activities, and the contractor leaving the site, the site soils must be fully stabilized by temporary seeding and/or mulching (or other acceptable process).

Straw-mulch shall be applied at a rate of 1 bale per every ten (10) feet of curb, at a width of thirty (30) feet (or 1 bale/300 sq/ft). Wood chips may also be used but must be spread at a minimum depth of four inches over the thirty-foot width and must be accompanied by a properly installed silt fence.

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 18 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR RACED TRENCH, CUT A MINIMUM OF 8 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SURFACE EQUIPMENT THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE TRENCH SHALL BE FILLED WITH STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE, A MINIMUM OF 6 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPUNCE TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-INCH OVERLAP PRIOR TO DRIVING INTO THE GROUND.
10. MAINTENANCE—SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED.

SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE--HALF OF THE HEIGHT OF THE SILT FENCE.

SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVEINED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

CRITERIA FOR SILT FENCE MATERIALS

1. FENCE POSTS--THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS WILL BE 2" BY 2" IN NOMINAL DIMENSIONS. HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FEET. POSTS SHALL BE DRIVEN A MINIMUM 18 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
2. SILT FENCE FABRIC--SEE CHART

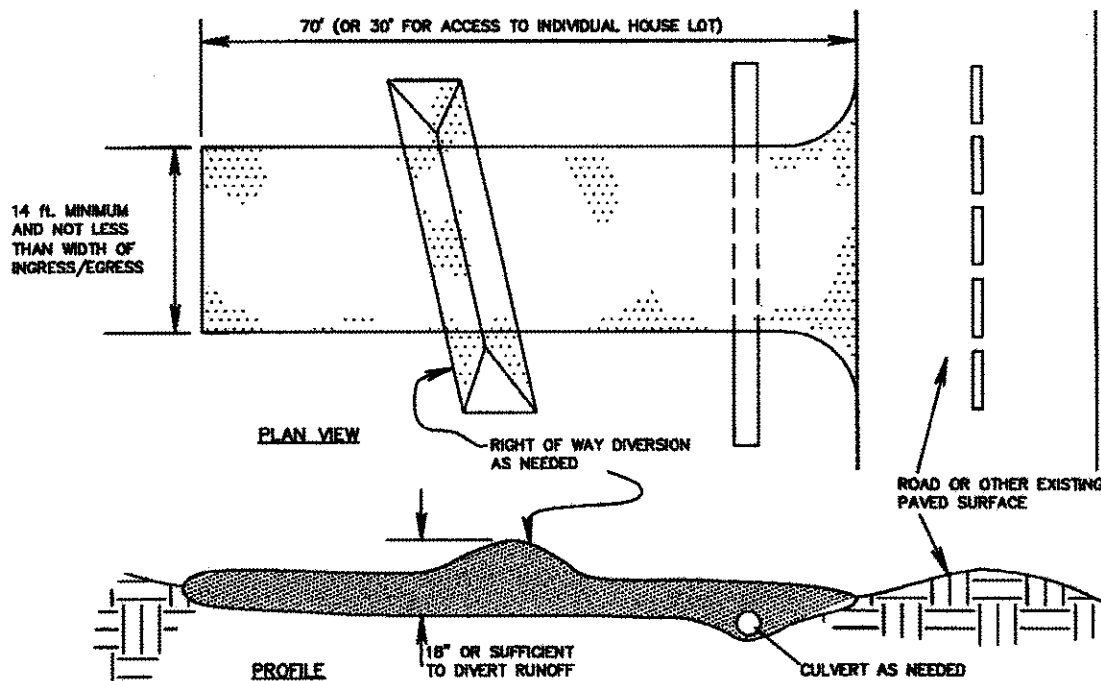
TEMPORARY SEEDING

SEEDING DATES	SPECIES	LB./1,000 S.F.	LB./PER ACRE
MARCH 1 - AUGUST 15	OATS	3	120 (4 BUSHEL)
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PERENNIAL RYEGRASS	1	40
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	ANNUAL RYEGRASS	1.25	55
	PERENNIAL RYEGRASS	3.25	142
	CREEPING RED FESCUE	0.4	17
	KENTUCKY BLUEGRASS	0.4	17
	OATS	3	120 (3 BUSHEL)
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
AUGUST 16 - NOVEMBER	RYE	3	112 (2 BUSHEL)
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	WHEAT	3	120 (2 BUSHEL)
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PERENNIAL RYEGRASS	1	40
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	ANNUAL RYEGRASS	1.25	40
	PERENNIAL RYEGRASS	3.25	40
	CREEPING RED FESCUE	0.4	40
	KENTUCKY BLUEGRASS	0.4	
NOVEMBER 1 ~ FEB. 20	USE MULCH ONLY OR DORMANT SEEDING.		

3. STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS AND SEDIMENT TRAPS SHALL BE INSTALLED AND STABILIZED WITH TEMPORARY SEEDING PRIOR TO GRADING THE REST OF THE CONSTRUCTION SITE.
2. TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION ACTIVITIES. SEEDING SHALL BE COMPLETED WITHIN 21 DAYS OR GREATER. THESE SOLE AREAS SHALL BE SEED WITHIN 7 DAYS AFTER GRADING.
3. THE SEEDING SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. TEMPORARY SEEDING SHALL BE APPLIED TO ALL EXPOSED SOIL. SEEDING MAY BE NEARLY IMPOSSIBLE.
4. SOIL AMENDMENTS—TEMPORARY VEGETATION SEEDING RATES SHALL ESTABLISH ADEQUATE STANDS OF VEGETATION, WHICH MAY REQUIRE THE USE OF SOIL AMENDMENTS. BASE RATES FOR LIME AND FERTILIZER SHALL BE SEEDING.
5. SEEDING METHOD—SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SPREADER, DRILL, CULTIPANNER SEEDER, OR HYDROSEEDER. WHEN FEASIBLE, SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR GRADING AND THEN LIGHTLY TAMPED INTO PLACE USING A ROLLER OR CULTIPANNER. HYDROSEEDING IS USED. THE SEED AND FERTILIZER SHALL BE SEED ON THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

MILCHING TELEGRAPH SEEDING

1. APPLICATIONS OF TEMPORARY SEEDING SHALL INCLUDE MULCH, WHICH SHALL BE APPLIED DURING OR IMMEDIATELY AFTER SEEDING. SEEDINGS MADE ON SLOPES OR IN VERY RAINY AREAS MAY REQUIRE VERY FLAT SOIL CONDITIONS MAY NOT NEED MULCH TO ACHIEVE ADEQUATE STABILIZATION.
2. MATERIALS:
- STRAW-IF STRAW IS USED, IT SHALL BE UNROOTED SMALL-GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE OR 50 LBS./1,000 SQ.FT. (2-3 BALES)
 - HARDWOOD-WOOD CELLULOSE FIBER IS USED, IT SHALL BE USED AT 5000 LBS./AC. OR 45 LB./1,000-SQ.FT.
 - OTHER-OTHER ACCEPTABLE MULCHES INCLUDE MULCH MATTINGS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TON/AC.
3. STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER. ANCHORING METHODS:
- ANCHORING CHAINS, OR SIMILAR TYPE TOOL, SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL.
 - STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT LEFT TO A LENGTH OF APPROXIMATELY 6 INCHES.
 - MULCH NETTING-NETTING SHALL BE USED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. NETTING SHALL BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.
4. SYNTHETIC BINDERS-SYNTHETIC BINDERS SUCH AS ACRYLIC ULR (AER-7ACG), DCA-70, PETROSEAL, RUBRA TRACK OR EQUIVALENT MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER.
5. REPAIR-BINDERS-REPAIR-BINDERS SHALL BE APPLIED AT A NET DRY WT. OF 750 LB./AC. THE WOOD-CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB./100 GAL.



CONSTRUCTION ENTRANCE

SPECIFICATIONS FOR CONSTRUCTION ENTRANCE:

1. STONE SIZE--ODOT #2 (1.5-2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH--THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPT ON SINGLE RESIDUAL LOOPS WHERE A 30-FT. MINIMUM LENGTH APPLIES).
3. THICKNESS--THE STONE LAYER SHALL BE AT LEAST 6 IN. THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 12 IN. THICK FOR HEAVY DUTY USE.
4. WIDTH--THE ENTRANCE SHALL BE AT LEAST 14 FT. WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE BARRIERS AND EGRESS OCCURS.
5. GEOTEXTILE--A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECS.

GEOTECHNICAL SPECIFICATION FOR CONSTRUCTION ENTRANCE	
MINIMUM TENSILE STRENGTH	200 LBS
MINIMUM PUNCTURE STRENGTH	80 PS
MINIMUM TEAR STRENGTH	50 LBS
MINIMUM BUST STRENGTH	300 PS
MINIMUM ELONGATION	20%
EQUIVALENT OPENING SIZE	EDS < 0.5 mm
PERMEABILITY	1×10^{-10} cm/sec

- | | | |
|--------------|--|-----------------------------|
| PERMEABILITY | | 1 X 10 ⁻³ CM/SEC |
|--------------|--|-----------------------------|
6. TANKS — THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
7. GULVERT — A PIPE OR GULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING ACROSS THE ENTRANCE FROM BEING DIRECTED OUT INTO PAVED SURFACES.
8. WHEN A BOX — A WALKER BOX SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND/OR INTO PAVED SURFACES.
9. MAINTENANCE — TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED OUT PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPPING OR SWEEPING.
10. CONSTRUCTION ENTRANCES SHALL NOT BE USED UNLESS TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
11. REMOVAL — THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED.

DESCRIPTION:

A CONSTRUCTION ENTRANCE IS A STABILIZED PAD OF AGGREGATE OVER A GEOTEXTILE BASE AND IS USED TO REDUCE THE AMOUNT OF MUD TRACKED OFF-SITE WITH CONSTRUCTION TRAFFIC.

CONDITIONS WHERE PRACTICE APPLIES:

A CONSTRUCTION ENTRANCE SHOULD BE USED:

- WHERE CONSTRUCTION VEHICLES LEAVE ACTIVE CONSTRUCTION AREAS ONTO SURFACES WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS;
- AT ALL POINTS OF EGRESS TO PUBLIC ROADS;
- WHERE FREQUENT VEHICLES AND EQUIPMENT INGRESS/EGRESS IS EXPECTED SUCH AS AT THE AT THE ENTRANCE OF INDIVIDUAL BUILDING LOTS;

PLANNING CONSIDERATIONS:

THIS PRACTICE SHOULD NOT BE RELIED ON TO REMOVE VEH FROM CONSTRUCTION TRAFFIC. MOST MID IS FLING FROM TIMES AS VEHICLES REACH SPEEDS HIGHER THAN IS REACHED ON SITE. THE BEST APPROACH TO PREVENTING OFF-SITE TRACKING IS TO KEEP VEHICLES THAT FREQUENTLY ENTER AND LEAVE A SITE AWAY FROM HURDLY AREAS IN THE FIRST PLACE. VEHICLES SHOULD BE RESTRICTED TO STABILIZED AREAS TO THE EXTENT PRACTICAL, AND AREAS WHERE FREQUENT DUMPING/UNLOADING IS EXPECTED SHOULD BE STABILIZED.

9. MAINTENANCE--TOP SURFACING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. RUB STIPLED, CRACKED, WASHED OR TRACKED OUT PUBLIC ROADS, OR ANY SURFACE WHERE SURFING IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
10. CONSTRUCTION ENTRANCES SHALL NOT BE USED LONGER TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
11. REMEDIATION--THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED.

HORIZ. SCALE:		VERT. SCALE:		5425 WARNER ROAD - SUITE 12 VALLEY VIEW, OHIO 44255 440-602-9071 FAX 216-360-0250		SITE PLAN FOR B.R. KNEZ CONSTRUCTION, INC. 1483 VILLA GRANDE DRIVE BEING SUBLT 2 IN THE VILLA GRANDE AT LAKE ERIE SHORES PLAT VOLUME 54, PAGE 4 P.P.#1-B-043-G-00-002-0 PAINESVILLE TOWNSHIP, COUNTY OF LAKE STATE OF OHIO					
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